

the efficiency of the scales was not attributable to them as a consequence of their organization and the arrangement of their cells, but that the cells of the effective scales were lined or coated with a doubly-refractive substance, removable by acids. Not only, as above noticed, is this statement of the want of action in the scales of the Olive incorrect, but the second statement, that acids remove the efficiency of the scales of *Eleagnus*, is only correct in the most limited degree, and is explicable in a different way from that in which Ehrenberg viewed it. Even twelve hours' maceration of these scales in fuming nitric acid or hydrochloric acid exerts no influence upon them, while sulphuric acid in a short time weakens the property in question extremely, without however fully destroying it. As to the cause of this, microscopic examination of the scales treated in this way leaves no doubt, since it demonstrates that the sulphuric acid dissolves the secondary lamellæ of the cells, and reduces the cell-membrane to an excessively thin pellicle. Consequently these scales cannot be adduced in evidence to prove that cellulose does not possess, independently and in itself, the property of double refraction. This renders superfluous any discussion of the hypothesis appended by Ehrenberg, that this unknown substance lining the cells may be crystallized.

It might be conjectured that the remarkably active effect which the epidermal cells of *Equisetum hyemale* exert upon polarized light, is to be ascribed to the deposition of abundance of silica in the substance of their cell-membranes. But this conjecture finds no confirmation in the circumstance that the effect of these membranes upon polarized light is exceedingly weakened when their organic substance is destroyed by heating to redness. However, this operation does not entirely destroy this action, neither does it in the Diatomeæ, in which, contrary to the statement of Ehrenberg, lately confirmed by J. W. Bailey (Quarterly Journal of Microscopic Science, 1856, p. 303), many forms, namely various species of *Navicula*, *Synedra*, but especially of *Pleurosigma*, and *Melosira arenaria*, were found by me to be decidedly doubly-refractive.

[To be continued.]

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## PROCEEDINGS OF LEARNED SOCIETIES.

### BOTANICAL SOCIETY OF EDINBURGH.

January 14, 1858.—Dr. Sellar, President, in the Chair.

The following papers were read :—

1. "On the Occurrence of a new *Muscari* on Mount Ida," by Dr. John Kirk.

In April 1856, the author and two other medical officers of the *Ann. & Mag. N. Hist.* Ser. 3. Vol. i. 14

hospital of Renkioi ascended Mount Ida. He says—"Early in the morning we began to ascend on foot. Proceeding in an oblique direction for some time, we came to one of the sources of the Scamander, where it gushes by many powerful springs from the schist rocks. In this neighbourhood we found Saxifrages, Geraniums, *Dentaria bulbifera*, *Ruscus hypoglossum*, and *Pæonia decora* among the fine timber of *Pinus Pinaster* which covered this region. There, too, the *Muscari* was picked in considerable abundance; it seems to be a new species, and we have named it, from its remarkably broad leaves, *M. latifolium*. It now appeared that our guides had deceived us, and taken us off the proper road, and from this point it seemed almost impossible to ascend. But, being determined to reach the top, we set off, leaving them to follow if they chose. Near the summit the forest opened out, and left nothing but bare rock; we picked the *Crocus garganicus*, *Corydalis tuberosa* and *digitata*, *Viola gracilis*, *Scilla bifolia*, *Ornithogalum nanum* and *fimbriatum*. The scanty soil had been turned up by the wild pigs in search of bulbous roots. The ascent had occupied from 7 in the morning till 3 P.M. On our return we followed a much easier path, and here we found the *Saxifraga sancta* growing in wet boggy spots. This species had been previously discovered by Griesbach on Mount Athos. The sun had set by the time we reached the village of Avjylar, and, having enjoyed a night's rest, we set off on our return to the hospital, where we arrived on the fifth day from our departure." Dr. Kirk briefly indicated, in the following terms, the characters of the new *Muscari*, which will be more fully described before he leaves for the Zambesi:—*Muscari latifolium*. Scape erect, about 12 inches in height, rising from a globose bulb, and bearing near its base a large sheathing, broadly lanceolate, rather obtuse, solitary leaf; flowers numerous, forming a raceme about 2 inches in length, the lower ones shortly pedicellate, the upper ones barren, sessile; perianth tubular (blue), in the fertile flowers inflated below.

2. "Note on *Cryphæa (Daltonia) Lamyana*, Montagne," by Dr. George Lawson.

Dr. Lawson stated, that in 1836 M. Montagne had described and figured, in apparently a very careful manner, a new moss found near Vienna, under the name of *Daltonia Lamyana*\*. Subsequent writers had referred it to *D. heteromalla*. Specimens shown to the meeting, which had been collected in the river Taw by the Rev. C. A. Johns, were considered by Mr. Wilson and others to be identical with M. Montagne's moss; but they differed so widely from his elaborate description, that Dr. Lawson thought the whole subject was still deserving of inquiry. The points which remain to be determined are these:—1. Is *D. Lamyana*, Montagne, a good species? 2. Is the English plant identical with it?

3. "On the correspondence between the Serial Internodes of Plants

\* Ann. des Sc. Nat., 2 série, Botanique, tom. vi. pp. 327-329. tab. 18. fig. 2.

and Serial Crystalline Forms," by Mr. Wm. Mitchell. Communicated by Professor Balfour.

4. "On *Macadamia*, a genus of Proteaceæ," by Dr. George Lawson.

The genus referred to is *Macadamia* (Müller), described in the 'Trans. of the Philos. Inst. of Victoria,' vol. ii. p. 72. It is a native of subtropical Australia.

#### ZOOLOGICAL SOCIETY.

July 14, 1857.—Dr. Gray, F.R.S., V.P., in the Chair.

ON STOASTOMIDÆ AS A FAMILY, AND ON SEVEN PROPOSED NEW GENERA, SIXTY-ONE NEW SPECIES, AND TWO NEW VARIETIES FROM JAMAICA. BY THE HON. EDWARD CHITTY.

[Concluded from page 150.]

#### Genus VII. LINDSLEYA.

*Shell globose-conic.*

LINDSLEYA LINDSLEYANA, Chitty. See *Stoastoma Lindsleyanum*, Adams. Mon. Stoast. Ad. 1849, p. 12; Cat. Phan. p. 229.

*Hab.* Manchester back-woods.

LINDSLEYA PICKERINGIANA, Chitty.

*Hab.* — ? , ? Manchester, ? Yallahs Hill.

*Form*, globose-conic. *Colour*, very pale horn. *Sculpture*, 17 strong blunted rounded spiral carinæ, within each interspace one or rarely two very fine carinæ: on the upper whorls 5, with a fine one in each interspace. *Spire*, well elevated, with straight outlines. *Apex*, rather sharp. *Whorls*, 5, well rounded, with a deep suture. *Aperture*, almost exactly semicircular, rather depressed below. *Labrum*, rather curvilinear in its plane, very slightly produced above, pectinated strongly by the strong carinæ. *Labium*, moderately detached from body-whorl, very slightly curved to the right below; on a plane with the labrum above, slightly lower below. *Umbilicus*, moderately deep and broad. *Labral lamella*, produced broadly, but sinking immediately into the umbilicus. *Operculum*, moderately concave, with a rather broad margin, with, on the labral side, 5 or 6 raised lamellæ converging towards the umbilicus, the labral side close to its lower extremity bending to the right like the labium, and at its very extremity furnished with a fine linguiform projection which spreads slightly over the labium.

Height 0·086, greatest breadth 0·14, least breadth 0·086.

Named in compliment to John Pickering, Esq., a collector of British shells.

This shell in many respects resembles *L. Lindsleyana*, but is much larger, and its proportions under measurement are very dissimilar; its aperture is wider, and apex much sharper.